



ARIZONA GAME AND FISH DEPARTMENT HERITAGE DATA MANAGEMENT SYSTEM

Animal Abstract

Element Code: ABNKC15010

Data Sensitivity: Yes

CLASSIFICATION, NOMENCLATURE, DESCRIPTION, RANGE

NAME: *Buteogallus anthracinus* Deppe

COMMON NAME: Common black-hawk, Lesser black hawk, Mexican black hawk, crab hawk, Sparrowhawk Black Crab seller, Sparrowhawk Crab seller, Aguililla-negra menor (Spanish)

SYNONYMS: *Falco anthracinus*, *Buteogallus anthracinus anthracinus*

FAMILY: Accipitridae

AUTHOR, PLACE OF PUBLICATION: W. Deppe, Preis-Verz. Saugheth. Vog...Mexico.
Pp: 3. 1830.

TYPE LOCALITY:

TYPE SPECIMEN:

TAXONOMIC UNIQUENESS: The species *anthracinus* is 1 of 5 within the genus *Buteogallus*, and is divided into 3 subspecies, *B.a. bangsi*, found on Cuba and Isle of Pines; *B.a. utilensis* farther south on islands in the Gulf of Honduras and *B.a. anthracinus* from northern South America to the southwestern United States (Schnell et al. 1986).

DESCRIPTION: A medium to large-sized hawk with broad rounded wings, and a hooked beak. The length is 20-22 inches (51-56 cm), wingspan 40-50 inches (102-127 cm), and a weight of 1.4-2.9 lbs (0.6-1.3 kg). As with most other raptor species, Common Black-hawks are sexually dimorphic, with the females being larger than the males. Adults are uniformly blackish except for the white 1-3 inch-wide median band on the short broad tail, which is the most distinctive identification mark for this species. The small white base of primaries, are not always visible. The sexes are similar and cannot be distinguished in the field with certainty except by behavioral differences, although many females have a longer light patch in the malar region below the eye. The iris of the eyes is brown. The cere (fleshy covering at the top of the beak), legs and facial skin are orange yellow to yellow; the bill tip is black.

Unlike most raptor hatchlings, which are covered with white down, Common Black-hawk chicks are reddish brown on the dorsal areas of the head, body, and wings and have a brownish black patch extending through eye. Immature plumage is dark brown dorsally; the breast and throat regions are yellowish tan and heavily streaked with dark brown wedge and diamond shaped blotches. They have a buff line over the eye, a dark eye-line, a buff cheek and a dark vertical stripe running down the face. The iris is medium-dark brown, similar to the adult's. Again, the tail provides a useful identification mark with its five to seven dark

bands alternating with very light (sometimes white) bands; broad terminal band is dark. This plumage is probably retained for about 1 to 1.5 years before the black adult feathers begin to emerge.

AIDS TO IDENTIFICATION: The white 1-3 inch-wide median band on the tail of adults is the most distinctive identification mark for this species. The Common Black-Hawk is slightly smaller than the Red-tailed Hawk (*Buteo jamaicensis*) but has wider wings and a shorter tail. In flight, the whitish patch at the base of the primaries, are smaller and less distinct than on the Black Vulture (*Coragyps atratus*). Distinguished from the Zone-tailed Hawk (*Buteo albonotatus*) by broader wings; broader tail with different pattern; more extensive yellow under eye.

ILLUSTRATIONS: Line drawings (Robbins et al. 1981:76)
Line drawings (Scott 1987:198)
Color drawing of egg (Baicich 1997)
Color drawing (Sibley 2000)
Color photos (Vezo in Glinksy 2002)
Color drawing (*In* http://www.percevia.com/explorer/db/birds_of_north_america_western/obj/441/target.aspx)
Color photo (*In* <http://www.damisela.com/zoo/ave/otros/falcon/>)
Color photo (*In* http://www.puntoverde.org/aves/Buteogallus_anthracinus)

TOTAL RANGE: From northern South America and Guyana, to Central America, throughout Mexico, to the southwestern United States, including Arizona, southwest New Mexico, western Texas, and southern Utah. Arrives in the U.S. to breed (northernmost breeding populations) as early as March-April, leaving by mid-October. Individuals occasionally overwinter in Arizona and New Mexico. Northernmost populations of N Mexico and S United States leave breeding area for the winter, while other populations are not known to migrate, and are presumed to be sedentary.

RANGE WITHIN ARIZONA: Arrives in breeding areas as early as March-April, migrating south across the border for the winter by mid-October. The breeding range is along remote streams draining the Mogollon Rim (central Arizona), the big Sandy and Virgin rivers drainages (northwestern Arizona), and the upper Gila River drainages (eastern Arizona).

SPECIES BIOLOGY AND POPULATION TRENDS

BIOLOGY: This species is thought to be long-lived. A nestling banded in 1977 was recovered 13 years and 6 months later. The voice of this hawk is unlike that of any other North American raptor. During the nesting season, the call is a loud and hoarse piercing whistle, lasting three to four seconds and composed of about seven or eight notes that increase abruptly in intensity, then progressively decrease. The most commonly heard call is a nasal, high-pitched, cry alarm. The flight pattern alternates between strong flapping flight and gliding.

REPRODUCTION: Defends small territory, used year after year by returning individuals. The male selects the nest site and carries the nesting material to the female who builds the nest. The nest is initially a small structure built on branches and smaller twigs, in palmettos, cypresses, pines, cottonwoods, sycamores, and other trees. Cottonwoods (79%) and sycamore (11%) were the dominant tree species used for nests in Arizona and New Mexico (Millsap 1981, Schnell 1994, Scovill 1995, *In Boal no date*) (See list of other tree species used below). Nests are typically built 60-120 ft above the ground, and are lined with twigs and some green leaves; nests usually built within 500 feet of permanent flowing water. Up to four copulations per day occur as the egg laying period approaches. The eggs are laid about one month after arrival (Schnell et al. 1986). The eggs have a granular surface, and the color is grayish white to greenish white, heavily speckled with brown blotches of varying shades and sizes; size measures 57 x 45 mm (2.5 x 1.5 in). Clutch size ranges between 1 to 3 eggs; usually 2 in Arizona. If the first clutch is lost the second clutch may only contain one egg. Incubation is reportedly about 38 days, by both sexes. In Arizona, 75% of clutches hatched latter half of May (one in late July). Young are tended by both sexes, with the first flight at 6-7 weeks, becoming independent in another 1.5-2 months. The male rarely brings food directly to the incubating female.

FOOD HABITS: Land crabs, amphibians, fishes, reptiles, and crayfish most common foods, although they may supplement their diet with small mammals and insects. Hunts primarily from perch, often near ground such as low branches, downed trees, exposed roots, and prominent rocks; also walks on sandbars and mud flats in search of crabs or stranded fish.

HABITAT: Obligate riparian nester, dependent on mature, relatively undisturbed habitat supported by a permanent flowing stream. Streams are less than 30.0 cm deep, of low to moderate gradient with many riffles, runs, pools and scattered boulders or lapped with branches. Groves of trees are preferred over single trees. Throughout its range, they generally inhabit coastal lowlands of mixed savannah, dunes, ponds, lagoons and grasslands with a source of water nearby.

ELEVATION: 1,750 - 7,080 ft. (533-2158 m), based on HDMS records (AGFD, unpublished records, accessed 2004).

PLANT COMMUNITY: “Riparian communities include the cottonwood-willow series (1224.53) of the Sonoran Riparian Deciduous Forest (<1,200 m elev.), the cottonwood-willow series (1223.21) and mixed broadleaf series (1223.22) of the Interior Southwestern Riparian Deciduous Forest (1100-1800 m elev.), and the cottonwood-willow series (1222.31) and mixed broadleaf series (1222.32) of the Rocky Mountain Riparian Deciduous Forest (1700-2300 m elev.).” (classifications from Brown et al. 1980, Boal no date).

Populus spp. (cottonwood) and *Platanus wrightii* (sycamore) are the dominant tree species used for nesting in Arizona and New Mexico. Other tree species used for nesting include *Alnus oblongifolia* (alder), *Fraxinus velutina* (ash), *Juglans major* (Arizona walnut), *Salix*

gooddingii (Goodding willow), *Quercus emoryi* (Emory oak), *Pinus ponderosa* (ponderosa pine), *Pseudotsuga menziesii* (Douglas fir), and *Prosopis* spp. (mesquite) (Boal no date).

POPULATION TRENDS: Unknown. Black-hawks seem to be self sustaining in North, Central, and South American populations, but the species exhibits a low reproduction rate.

The U.S. breeding population was estimated at about 220-250 pairs in the mid 1970's with most pairs (80-90%) occurring in Arizona (Schnell et al. 1988, in Boal no date). A survey conducted in Arizona and New Mexico in the 1980's found a minimum of 200 pairs (80-90% in AZ). A review of nesting records in natural heritage programs from Arizona, New Mexico, and Utah, and other agency and organization databases, indicated 150 breeding areas in Arizona, 35 in New Mexico, 1 in Utah, and as many as 10-20 pairs in Texas (Boal and Mannan 1996, in Boal no date). More recent information suggests 60-80 pairs in New Mexico (New Mexico Game and Fish 1996, in Boal no date). The Aravaipa Canyon population in Arizona, has provided baseline information since 1975. According to NatureServe (2004), "in 1994 the U.S. population was thought to be stable but precarious. Range-wide trends are unknown. Breeding population in south Texas declined in the early 1900's, and those in adjacent Mexico declined after 1958."

SPECIES PROTECTION AND CONSERVATION

ENDANGERED SPECIES ACT STATUS:
STATE STATUS:

None
WSC (AGFD, WSCA in prep)
[State Candidate AGFD, TNW 1988]
Forest Service Sensitive (USDA, FS Region
3 1999)
[Forest Service Sensitive USDA, FS Region
3 1988]
Listed Threatened (Secretaria de Desarrollo
Social, 1994)
Threatened (Texas)

OTHER STATUS:

MANAGEMENT FACTORS: Greatest threat is alteration and elimination of riparian habitat through clearing, water diversion, diking and damming, and lowering of the water table by underground pumping. At least 95% of the riparian habitat in the southwestern United States have been lost, altered, or degraded. They are vulnerable to disturbance and contamination of riparian prey species.

PROTECTIVE MEASURES TAKEN: Conservation depends on maintaining vital regions of riparian habitat, like Aravaipa Canyon Preserve in Arizona, which are free of disturbance and development. (Steinwand 2001).

SUGGESTED PROJECTS: Protect and enhance frog and fish populations near nest sites. Regenerate gallery forest trees by periodic suppression or elimination of livestock

grazing. Increase prey sources. Implement monitoring schedule of breeding black hawks to determine trends in the population. Determine the source of recruitment in the United States population. A comprehensive study to resolve the confused systematics and nomenclature in the *Buteogallus* complex needs to be performed. Also needed is an intensified banding program. No detailed information is available on pair bonding, territoriality, or most aspects of this species' social behavior.

LAND MANAGEMENT/OWNERSHIP: BIA – Fort Apache and San Carlos Reservations; BLM – Kingman, Phoenix, Safford, and Tucson Field Offices; NPS - Montezuma Castle National Monument and Saguaro National Park; USFS - Apache-Sitgreaves, Coconino, Coronado, Prescott, and Tonto National Forests; State Land Department; Red Rock State Park; City of Safford; TNC - Aravaipa Canyon, Buehman, Muleshoe Ranch, and Patagonia-Sonoita Creek Preserves; Private.

SOURCES OF FURTHER INFORMATION

REFERENCES:

- AOU. 1957. Check-list of North American Birds. American Ornithologists' Union. Pp. 112.
- Arizona Game and Fish Department. 1988. Threatened Native Wildlife in Arizona. Arizona Game and Fish Department Publication. Phoenix, Arizona. 32pp.
- Arizona Game and Fish Department. In prep. Wildlife of Special Concern in Arizona. Arizona Game and Fish Department Publication. Phoenix, Arizona. Pp: 32.
- Baichich, P.J. 1997. A Guide to the Nests, Eggs and Nestlings of North American Birds. Second Edition. Natural World Academic Press. New York. Pp. 97.
- BISON. Available: http://fwie.fw.vt.edu/states/nmex_main/species/040040.htm.
- Boal, C.W. No Date. Draft-Common Black Hawk Species Account. Strategies for Monitoring Common Black-Hawk (*Buteogallus anthracinus*) Populations in North America. 12pp.
- Brown, L., and D. Amadon. 1968. Eagles, Hawks, and Falcons of the World. Volume 2. Country Life Books. Pp. 555-557.
- Clark, W.S. 1987. A Field Guide to Hawks of North America. Houghton Mifflin Company. Boston, Massachusetts. Pp. 46-48.
- Deppe, W. 1830. Preis-Verz. Saugheth. Vog...Mexico. Pp. 3.
- Ehrlich, P.R. et al. 1988. The Birder's Handbook. Simon & Schuster Inc. New York, New York. Pp. 238.
- ENature. Available: <http://www.enature.com/fieldguide/showSpeciesAG.asp?agencyID=35...>
- Glinski, R.L., and T. Vezo. 2002. Birds of Prey in the American West. Rio Nuevo Publishers. Tucson, Arizona. Pp. 44-47.
- Hawks Conservancy Trust. Available: <http://www.hawk-conservancy.org/priors/commonblackhawk.shtml>.
- <http://dwrcdc.nr.utah.gov/rsgis2/Search/Display.asp?F1Nm=buteanth>.
- <http://www.avesphoto.com/website/pictures/HWKCBK-1.jpg>.
- <http://www.avesphoto.com/website/pictures/HWKCBK-2.jpg>.
- <http://www.bsc-eoc.org/avibase/>
- <http://www.damisela.com/zoo/ave/otros/falcon/accipitridae/accipitrinae/buteogallus/>

- <http://www.mbr-pwrc.usgs.gov/id/fram1st/Idtips/h3450id.html>.
http://www.percevia.com/explorer/db/birds_of_north_america_western/obj/441/target.aspx.
http://www.puntoverde.org.ve/aves/buteogallus_anthracinus/
http://131.220.109.5/groms/Species_HTMLs/Print_HTMLs/Banthrac_Print.html.
Integrated Taxonomic Information System (ITIS). Retrieved 12/9/2004 from ITIS, <http://www.itis.usda.gov>.
- Grossman, M.L., and J. Hamlet. 1964. Birds of Prey of the World.
- Lane, J.A. 1974. A Birder's guide to Southeastern Arizona. L & P Photography. Denver, Colorado. Pp. 63.
- National Geographic Society. 1999. Field Guide to the Birds of North America. Third Edition. National Geographic. Washington D.C. Pp. 198-199.
- NatureServe. 2004. An online encyclopedia of life [web application]. Version 4.1. Arlington, Virginia, USA: NatureServe. Available: <http://www.natureserve.org/explorer>. (Accessed: December 9, 2004).
- Palmer, R.S. 1988. Handbook of North American Birds. Volume 4. Yale University Press. London. Pp. 379-389.
- Phillips, A. et al. 1964. Birds of Arizona. The University of Arizona Press. Tucson, Arizona. Pp. 24.
- Robbins, C.S. et al. 1981. A guide to field identification, birds of North America. Golden Press. New York. p. 76.
- Rosenberg, K.V. et al. 1991. Birds of the lower Colorado River valley. The University of Arizona Press. Tucson, Arizona. p.153.
- Russell, S.M., and G. Monson. 1998. The Birds of Sonora. The University of Arizona Press. Tucson, Arizona. Pp. 66.
- Scott, S.L. 1987. The National Geographic Society field guide to the birds of North America. 2nd edition. National Geographic Society. Washington, D.C. p. 198.
- Schnell, J.H., R. Glinski, and H.A. Snyder. 1986. Proceedings of the southwest raptor management symposium and workshop. National Wildlife Federation Scientific and Technical Series. No. 11. University of Arizona, Tucson. Pp. 65-71.
- Schnell, J.H. 1994. Common Black-Hawk (*Buteogallus anthracinus*). In The Birds of North America, No. 122 (A. Poole and F. Gill, Eds.). Philadelphia: The Academy of Natural Sciences; Washington, D.C.: The American Ornithologists' Union.
- Schnell, J.H. In Glinski, R.L. 1998. The Raptors of Arizona. The University of Arizona Press. Tucson, Arizona. Pp. 73-76.
- Sibley, D.A. 2000. The Sibley Guide to Birds. Alfred. A. Knopf. New York, New York. Pp. 115.
- Steinwand, J. 2001. "*Buteogallus anthracinus*" (On-line), Animal Diversity Web. Accessed March 02, 2005 at http://animaldiversity.ummz.umich.edu/site/accounts/information/Buteogallus_anthracinus.html.
- Terres, J.K. 1980. The Audubon Society encyclopedia of North American birds. Alfred A. Knopf. New York, New York. p.480.
- USDA, Forest Service Region 3. 1988. Regional Forester's Sensitive Species List.
- USDA, Forest Service Region 3. 1999. Regional Forester's Sensitive Species List.

MAJOR KNOWLEDGEABLE INDIVIDUALS:

Richard Glinski – Private ornithologist (Retired AGFD), Wickenburg, Arizona.

ADDITIONAL INFORMATION:

Revised: 1995-01-19 (DBI)
1999-10-04 (SSS)
2005-01-28 (AMS)
2005-03-24 (SMS)

To the user of this abstract: you may use the entire abstract or any part of it. We do request, however, that if you make use of this abstract in plans, reports, publications, etc. that you credit the Arizona Game and Fish Department. Please use the following citation:

Arizona Game and Fish Department. 20XX (= **year of last revision as indicated at end of abstract**). X...X (= **taxon of animal or plant**). Unpublished abstract compiled and edited by the Heritage Data Management System, Arizona Game and Fish Department, Phoenix, AZ. X pp.